REMARKS

Claims 1-50 are pending in the above-identified application, and were rejected. With this Amendment, claims 3, 4, 6, 8, 11, 12, 14, 16, 19, 20, 22, 24, 27, 28, 30, 32, 35, 36, 38, 40, 41, 44, 45, 57, 49, and 50 were amended, and claims 1, 2, 9, 10, 17, 18, 25, 26, 33, 34, 42, and 43 were cancelled. Accordingly, claims 3-8, 11-16, 19-24, 27-32, 35-41, and 44-50 are at issue in the above-identified application.

I. Objection To Specification

The disclosure was objected to because of various informalities. In response, Applicants have amended the specification. Accordingly, Applicants respectfully request withdrawal of this objection.

II. 35 U.S.C. § 102 Anticipation Rejection of Claims

Claims 1-2, 4, 9-10, 12, 17-18, 20, 25-26, 28, 33-34, 36, 42-43, and 45 were rejected under 35 U.S.C. § 102(e) as being anticipated by Takahashi et al. (U.S. Patent No. 6,347,185). Applicants respectfully traverse this rejection.

Claims 1, 2, 9, 10, 17, 18, 25, 26, 33, 34, 42, and 43 have been cancelled, and claims 4, 12, 20, 28, 36, and 45 have been amended to depend from claims that were not rejected as being anticipated by Takahashi et al. Accordingly, Applicants respectfully request withdrawal of this rejection.

III. 35 U.S.C. § 103 Obviousness Rejection of Claims

Claims 3, 5, 11, 13, 19, 21, 27, 29, 35, 37, 41, 44, 46, and 50 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Takahashi et al. in view of Lindemann (U.S. Patent No. 6,316,710). Applicants respectfully traverse this rejection.

Claim 3 is directed to a method for classifying signals, and includes classifying the signal of each block into a category according to the characteristic quantities thereof. The signal of each block is classified into any of the categories formed on the basis of types structures that signals may have and do not depend on the types of signal sources.

Claim 11 is directed to an apparatus for classifying signals, and includes a categorical classifying means, wherein the categorical classifying means classifies the signal of each block into any of the categories formed on the basis of types of structures that signals may have and do not depend on the types of signal sources.

Claim 19 is directed to a method for generating descriptors, and includes classifying the signal of each block into a category according to the characteristic quantities thereof. The signal of each block is classified into any of the categories formed on the basis of types of structures that signals may have and do not depend on the types of signal sources.

Claim 27 is directed to an apparatus for generating descriptors, and includes a categorical classifying means, wherein the categorical classifying means classifies the signal of each block into any of the categories formed on the basis of types of structures that signals may have and do not depend on the types of signal sources.

Claim 35 is directed to a method for retrieving signals, and includes classifying the signal of each block into a category according to the characteristic quantities thereof. The signal of each block is classified into any of the categories formed on the basis of types of structures that signals may have and do not depend on the types of signal sources.

Claim 44 is directed to apparatus for retrieving signals, and includes a categorical classifying means, wherein the categorical classifying means classifies the signal of each block

into any of the categories formed on the basis of types of structures that signals may have and do not depend on the types of signal sources.

As discussed above, each of claims 3, 11, 19, 27, 35, and 44 includes classifying the signal of each block into any of the categories formed on the basis of types of structures that signals may have and do not depend on the types of signal sources.

Applicants agree with the Examiner that Takahashi et al. does not disclose a method and an apparatus for classifying signals and generating descriptors, wherein the signal of each block is classified into any of the categories formed on the basis of types structures that signals may have and do not depend on the types of signal sources. Contrary to the Examiner's statement, however, Lindemann classifies the signal of each block depending on the types of signal sources. In particular, the musical gesture types in Lindemann are classified depending on the specific instrument, e.g., trumpet, violin, saxophone, etc. See column 4, lines 14-16. Thus, Lindemann does not disclose or suggest classifying the signal of each block into any of the categories formed on the basis of types of structures that signals may have and do not depend on the types of signal sources, as required by claims 3, 11, 19, 27, 35, and 44. As such, it would not have been obvious to one having ordinary skill in the art at the time of the invention to modify the method or the apparatus of Takahashi et al. with Lindemann to derive claims 3, 11, 19, 27, 35, and 44. Accordingly, Applicants respectfully submit that claims 3, 11, 19, 27, 35, and 44 are allowable over Takahashi et al. in view of Lindemann. In addition, Applicants respectfully submit that claims 5, 13, 21, 29, 37, 41, 46, and 50 are also allowable over Takahashi et al. in view of Lindemann by virtue of their respective dependencies on claims 3, 11, 19, 27, 35, and 44. Accordingly, Applicants respectfully request withdrawal of this rejection.

Claims 8, 16, 24, 32, 40 and 49 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Takahashi et al. in view of Wu et al. (U.S. Patent No. 6,006,179). Applicants respectfully traverse this rejection.

As discussed above, Takahashi et al. does not disclose a method and an apparatus for classifying signals and generating descriptors, wherein the signal of each block is classified into any of the categories formed on the basis of types structures that signals may have and do not depend on the types of signal sources, as required by claims 3, 11, 19, 27, 35, and 44. Thus, it would not have been obvious to one of ordinary skill in the art at the time the invention was made to modify the disclosure of Takahashi et al. with the teachings of Wu et al. to derive claims 8, 16, 24, 32, 40 and 49, which depend from claims 3, 11, 19, 27, 35, and 44, respectively. Accordingly, Applicants respectfully submit that claims 8, 16, 24, 32, 40 and 49 are allowable over Takahashi et al. in view of Wu et al., and respectfully request withdrawal of this rejection.

Claims 6-7, 14-15, 22-23, 30-31, 38-39 and 47-48 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Takahashi et al. in view of Pertrushin (U.S. Patent No. 6,151,571). Applicants respectfully traverse this rejection.

As discussed above, Takahashi et al. does not disclose a method and an apparatus for classifying signals and generating descriptors, wherein the signal of each block is classified into any of the categories formed on the basis of types structures that signals may have and do not depend on the types of signal sources, as required by claims 3, 11, 19, 27, 35, and 44. Thus, it would not have been obvious to one of ordinary skill in the art at the time the invention was made to modify the disclosure of Takahashi et al. with the teachings of Pertrushin to derive claims 6-7, 14-15, 22-23, 30-31, 38-39 and 47-48, which depend from claims 3, 11, 19, 27, 35,

and 44, respectively. Accordingly, Applicants respectfully submit that claims 6-7, 14-15, 22-23, 30-31, 38-39 and 47-48 are allowable over Takahashi et al. in view of Pertrushin, and respectfully request withdrawal of this rejection.

IV. Conclusion

In view of the above amendments and remarks, Applicants submit that all claims are clearly allowable over the cited prior art, and respectfully request early and favorable notification to that effect.

Respectfully submitted,

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By: _____

Marina N. Saito
Registration No. 42,121
SONNENSCHEIN NATH & ROSENTHAL LLP
P.O. Box 061080
Wacker Drive Station, Sears Tower
Chicago, Illinois 60606-1080
(312) 876-8000